NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 4towardria, Virgima 22313-1450

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 04/10/2009 WENDEROTH, LIND & PONACK, L.L.P.

1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503

PRODUCING FRONT PLATE OF PLASMA DISPLAY DEVICE

| EXAMINER      |              |  |
|---------------|--------------|--|
| HINES, ANNE M |              |  |
| ART UNIT      | PAPER NUMBER |  |
| 2970          | •            |  |

DATE MAILED: 04/10/2009

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/526,491      | 03/04/2005  | Hitoshi Setsuda      | 2005_0355A          | 8005             |

TITLE OF INVENTION: UNBAKED LAMINATE FOR PRODUCING FRONT PLATE OF PLASMA DISPLAY DEVICE, AND METHOD FOR

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$300               | \$0                  | \$1810           | 07/10/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further<br>indicated unless correcte<br>maintenance fee notifical   | correspondence includired below or directed oth   | ng the Patent, advance on<br>nerwise in Block 1, by (a  | rders and notification of r<br>a) specifying a new corres   | naintenance fees w<br>pondence address;  | ill be<br>and/or                                | mailed to the current<br>(b) indicating a sepa   | correspondence address as<br>trate "FEE ADDRESS" for  |
|--|---|---|---|--|---|--|---|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)   |   |   | Dane  | ers. Each additional   | paper   | , such as an assignme  | r domestic mailings of the<br>or any other accompanying<br>nt or formal drawing, must   |
| 513  | 7590 04/10  | V2009   | have  |  |   | ling or transmission.  |   |
| 1030 15th Street<br>Suite 400 East   |   | .CK, L.L.P.   | I he<br>Stat<br>addi<br>tran  | Cert reby certify that thi es Postal Service w ressed to the Mail smitted to the USP                                     | ificate<br>s Fee(<br>ith suf<br>Stop<br>FO (57  | of Mailing or Trans<br>s) Transmittal is being<br>ficient postage for firs<br>ISSUE FEE address<br>I) 273-2885, on the d     | mission g deposited with the United at class mail in an envelope above, or being facsimile ate indicated below.                                   |
| Washington, DC   | 20005-1503  |   |   |  |   |  | (Depositor's name)  |
|  |   |   |   |  |   |  | (Signature)   |
|  |   |   |   |  |   |  | (Date)  |
| APPLICATION NO.  | FILING DATE   |   | FIRST NAMED INVENTOR  |  | ATTO  | RNEY DOCKET NO.  | CONFIRMATION NO.  |
| 10/526,491   | 03/04/2005  |   | Hitoshi Setsuda   |  |   | 2005_0355A   | 8005  |
| TITLE OF INVENTION PRODUCING FRONT F   |   |   | G FRONT PLATE OF  | PLASMA DISPLA  | AY DE   | EVICE, AND METH  | OD FOR  |
| APPLN. TYPE  | SMALL ENTITY  | ISSUE FEE DUE   | PUBLICATION FEE DUE   | PREV. PAID ISSUE   | FEE   | TOTAL FEE(S) DUE   | DATE DUE  |
| nonprovisional   | NO  | \$1510  | \$300   | \$0  |   | \$1810   | 07/10/2009  |
| EXAM   | INER  | ART UNIT  | CLASS-SUBCLASS  | ]  |   |  |   |
| HINES, A   | ANNE M  | 2879  | 445-024000  |  |   |  |   |
| CFR 1.363.)  Change of correspondence address (or Change of Correspondence Address from PTO/SB/122) attached.  Tee Address "indication (or "Fee Address" Indication form PTO/SB/128 Pto 0.940.2 or more recent) attached. Use of a Customer 1.00 pto 0.94 pto 0 |   |   | (I) the names of up to<br>or agents OR, alternativ<br>(2) the name of a singl<br>registered attorney or a                                     | of a single firm (having as a member a corney or agent) and the names of up to salent attorneys or agents. If no name is |   |  |   |
| PLEASE NOTE: Uni<br>recordation as set forti<br>(A) NAME OF ASSIG  | less an assignee is ident<br>h in 37 CFR 3.11. Comp<br>GNEE   | ified below, no assignee<br>pletion of this form is NO  | (B) RESIDENCE: (CITY  | ntent. If an assigne<br>assignment.<br>and STATE OR C  | OUNT  | 'RY)   | ocument has been filed for  |
| 4a. The following fee(s):  Issue Fee Publication Fee (N  | o small entity discount p   |   | p. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo                            | d. Form PTO-2038   | is atta   | ched.<br>required fee(s), any de   |   |
|  | s SMALL ENTITY state  | as. See 37 CFR 1.27.  | ☐ b. Applicant is no lon  |  |   |  |   |
| NOTE: The Issue Fee an<br>interest as shown by the   | d Publication Fee (if req<br>records of the United Sta  | uired) will not be accepte<br>tes Patent and Trademark  | d from anyone other than t<br>Office.   | he applicant; a regis  | stered a  | attorney or agent; or th   | e assignee or other party in  |
| Authorized Signature   |   |   |   | Date   |   |  |   |
| Typed or printed name  | Typed or printed name   |   |   |  |   |  |   |
| This collection of inform<br>an application. Confident<br>submitting the complete<br>this form and/or suggesti<br>Box 1450, Alexandria, V<br>Alexandria, Virginia 223  | ation is required by 37 C<br>tiality is governed by 35<br>d application form to the<br>ons for reducing this but<br>firginia 22313-1450. DC<br>13-1450. | CFR 1.311. The informatis<br>U.S.C. 122 and 37 CFR<br>USPTO. Time will vary<br>rden, should be sent to the<br>ONOT SEND FEES OR | on is required to obtain or r<br>1.14. This collection is est<br>depending upon the indiv<br>e Chief Information Office<br>COMPLETED FORMS TO | retain a benefit by the<br>imated to take 12 n<br>idual case. Any co-<br>er, U.S. Patent and<br>O THIS ADDRESS           | ne publ<br>ninutes<br>mment<br>Fraden<br>. SENI | tic which is to file (and<br>to complete, includin<br>s on the amount of tin<br>nark Office, U.S. Depo<br>D TO: Commissioner | by the USPTO to process)<br>g gathering, preparing, and<br>ne you require to complete<br>artment of Commerce, P.O.<br>for Patents, P.O. Box 1450, |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



## UNITED STATES PATENT AND TRADEMARK OFFICE

## NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 04/10/2009

| APPLICATION NO.                    | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-----------------|----------------------|---------------------|------------------|
| 10/526,491                         | 03/04/2005      | Hitoshi Setsuda      | 2005_0355A          | 8005             |
| 513                                | 7590 04/10/2009 |                      | EXAM                | IINER            |
| WENDEROTH.                         | LIND & PONACK,  | L.L.P.               | HINES,              | ANNE M           |
| 1030 15th Street,                  | N.W.,           |                      | ART UNIT            | PAPER NUMBER     |
| Suite 400 East<br>Washington, DC 2 | 20005 1502      |                      | 2879                |                  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 465 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 465 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

## Notice of Allowability

| Application No. | Applicant(s)   |  |
|-----------------|----------------|--|
| 10/526,491      | SETSUDA ET AL. |  |
| Examiner        | Art Unit       |  |
| ANNE M HINES    | 2870           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERTIS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 133 and MPEP 1308.

- 1. This communication is responsive to Amendment filed 2/17/09.
- The allowed claim(s) is/are 2,3,5,8-11 and 13-19.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 

    All b) 

    Some\* c) 

    None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) I hereto or 2) to Paper No./Mail Date \_\_\_\_\_
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other \_\_\_\_

Application/Control Number: 10/526,491 Page 2

Art Unit: 2879

## DETAILED ACTION

## Response to Amendment

The amendment filed on February 17, 2009, has been entered and acknowledged by the Examiner.

Claims 2-3, 5, 8-11, 13-19 are pending in the instant application.

## Allowable Subject Matter

Claims 2-3, 5, 8-11, 13-19 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding independent claim 2, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 2, and specifically comprising the limitation wherein an unbaked laminate for producing a front plate of a plasma display device has a glass substrate having a surface on which electrodes are formed, A dielectric layer formed on the surface, and spacer layer formed on the dielectric layer, the laminate consisting of a removable support film, a photosensitive unbaked spacer material layer formed on the removable support film, and a burnable intermediate layer formed on the spacer material layer, the intermediate layer being water-soluble or water-swellable.

Regarding claims 5 and 14-15, claims 5 and 14-15 are allowable for the reasons given in claim 2 because of their dependency status from claim 2.

Regarding independent claim 3, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 3, and

Application/Control Number: 10/526,491

Art Unit: 2879

specifically comprising the limitation wherein an unbaked laminate for producing the front plate of a plasma display device has a glass substrate having a surface on which electrodes are formed, a dielectric layer formed on the surface, and spacer layers formed on the dielectric layer, the laminate comprising a removable support film, a photosensitive unbaked spacer material layer formed on the removable support film, a burnable intermediate layer formed on the spacer material layer, the intermediate layer being water-soluble or water-swellable, and a non-photosensitive unbaked dielectric layer formed on the burnable intermediate layer. the dielectric layer consisting of a glass paste material.

Regarding claims 13 and 16-18, claims 13 and 16-18 are allowable for the reasons given in claim 3 because of their dependency status from claim 3.

Regarding independent claim 8, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 8, and specifically comprising the limitation wherein a method for producing a front plate of a plasma display panel having a glass substrate having a surface on which electrodes are formed. A dielectric layer formed on the surface, and spacer layers formed on the dielectric layer, the method comprising the steps of forming on the surface of the substrate a non-photosensitive unbaked dielectric layer consisting of glass paste material, a burnable intermediate layer which is water-soluble or water-swellable, and a photosensitive unbaked spacer material in this order, irradiating the spacer material layer with a patterning light, and developing the spacer material layer, to constitute a

Application/Control Number: 10/526,491

Art Unit: 2879

patterned spacer layer, baking the non-photosensitive unbaked dielectric layer, the burnable intermediate layer, and the patterned spacer material layer simultaneously, to burn up the burnable intermediate layer and form the dielectric layer and spacer layers on the glass substrate simultaneously.

Regarding claims 9-11, claims 9-11 are allowable for the reasons given in claim 8 because of their dependency status from claim 8.

Regarding independent claim 19, the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 19, and specifically comprising the limitation an unbaked laminate for producing the front plate of a plasma display device having a glass substrate having a surface on which electrodes are formed, a dielectric layer formed on the surface, and spacer layers formed on the dielectric layer, the laminate consisting of a removable support film, a photosensitive unbaked spacer material layer formed on the removable support film, a burnable intermediate layer formed on the spacer material layer, the intermediate layer being water-soluble or water-swellable, and a removable protection film covering a surface of the laminate, the surface being on the other side of the removable support film.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/526,491

Art Unit: 2879

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Anne M. Hines whose telephone number is (571) 272-

2285. The examiner can normally be reached on Monday through Friday from 8:00-

4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Anne M Hines/ Patent Examiner

Art Unit 2879

/Sikha Roy/

Primary Examiner, Art Unit 2879